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Stop IAKT syndrome with student live search demos

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Abstract

Purpose – The purpose of this paper is to share a classroom teaching technique and pedagogical style that can alleviate difficulties encountered during information literacy instruction sessions when students think they already know everything the librarian instructor plans to cover in the session. Ignoring this situation can result in a poor teaching and learning experience for all.

Design/methodology/approach – This is a case study in which the author describes how to effectively involve students as active participants in search demonstrations during instruction sessions. It provides both a pedagogical rationale for this practice and practical examples of how it is accomplished.

Findings – Though inviting students to conduct live searches in an instruction session is somewhat risky, the author concludes that engaging students by having them demonstrate online searches is of greater interest to their peers and contributes to a more powerful learning experience.

Practical implications – This paper provides clear examples of how to effectively engage students in live online search demonstrations, including handling problematic situations in which students may be uncooperative. The key implication is that instruction sessions can improve when the instructor relinquishes some control to the students.

Originality/value – While some research recommends active learning techniques to reduce student boredom in library instruction sessions, a literature search indicates that no previous articles discuss IAKT Syndrome. Instruction librarians will find value in learning about the promise and pitfalls of inviting students to demonstrate searches during their sessions, and how it can promote a better, more engaging learning experience.

Keywords Information literacy, Library instruction, Learning, Teaching methods

Paper type Case study

Introduction

The good news is that colleges and universities are instituting information literacy initiatives or are on the path to doing so. Students are gradually becoming more knowledgeable about the academic library's resources, and where they fit into the spectrum of information options. While the library literature yields no exact number on the penetration of information literacy education in higher education, the 2003 Academic Library Trends and Statistics produced by the Association of College and Libraries indicated that ninety-three percent of all respondents reported developing course-specific library instruction in collaboration with instructors. (Association of College and Research Libraries, 2003, p. 159).

At Philadelphia University, where the author serves as library director, a comprehensive information literacy program was instituted in 2000. Working with faculty members through a governance sanctioned information literacy task force, an across-the-curriculum, tiered information literacy program was developed to reach the institution's 2,400 undergraduate students. In each of the institution's six colleges, specific courses are targeted for information literacy instruction from the freshmen



level through senior capstone courses. Each librarian is a liaison to a specific school, and is responsible for meeting the information literacy instruction needs of that school. More information about this information literacy initiative is found at www.philau.edu/infolit. The author is responsible for the implementation of the information literacy initiative in the business school, and designs, develops and conducts instruction for targeted information literacy courses. In addition, instruction is provided on request for other business courses.

A long-term trend in information literacy education is to make the delivery of library instruction an active learning experience. There is abundant literature on the need for librarians conducting information literacy instruction to emphasize active learning techniques. As a profession we need to employ "a much more dynamic and diverse approach to learning, incorporating a variety of teaching techniques in response to the varied learning styles we find in our classrooms" (Hunt and Birks, 2004). Ridgeway (1989), Sheridan (1990), Snavely (1998) and Jacobson and Mark (1995) also address many benefits to these styles of instruction, including meeting the needs and learning styles of diverse students, improving student retention of information presented, increasing student interaction with information, and increasing student responsibility for their own learning in the classroom.

I already know this

As a result of the acceptance of information literacy among faculty and administrations, information literacy education is on the increase. As academic librarians conduct more and more instruction sessions, even when they do incorporate active learning methods, they may find themselves dealing with an undesirable response to information literacy instruction referred to here as "I Already Know This" (IAKT). From the students' perspective all instruction may appear to be the same. Exposure to a variety of information literacy sessions as freshmen can lead students to assume that any librarian providing instruction in their sophomore and upper level courses is simply there to rehash an earlier presentation. As our faculty become more open to inviting librarians to provide information literacy instruction sessions, librarians invite the possibility of creating an information literacy overload among the student community. The burden is on the librarian instructor to employ pedagogical methods that will enable students to distinguish between multiple sessions to recognize their distinctive and differentiated features.

A review of the literature conducted for this article, using sources such as *Library Literature*, *LISA* (Library and Information Science Abstracts), *Information Science Abstracts*, and *ERIC*, produces no references to IAKT Syndrome or a similarly developed concept. Several articles do advocate the adoption of active learning techniques to prevent student boredom, a key symptom of IAKT Syndrome. Manuel reminds us that contemporary students "are commonly characterized as having low thresholds for boredom and short attention spans. . .they are also more likely to hold instructors accountable for making learning boring or interesting to them". (Manuel, 2002, p. 205-6). While lectures and demonstrations by librarians may fit some situations, studies show that they are less conducive to retention. In addition, students report they prefer other instructional methods to lecture which they find boring. (Krajewski and Piroli, 2002).

Even though each instruction session is carefully designed to meet information literacy objectives for a specific educational level and/or discipline, and therefore does differ in its own way, students often fail to grasp these distinctions. Despite pedagogical techniques intended to remedy student indifference to repeated instruction sessions, for example, incorporating different active learning methods, overcoming IAKT syndrome is a formidable challenge. IAKT syndrome is fairly easy to diagnose. The next time a faculty member says "I've invited a librarian here today to help you learn how to research our assignment", and the librarian hears a collective sigh along with a chorus of "but I already heard all of this last semester", the librarian will know that students are suffering from IAKT syndrome.

One way to deal with the syndrome is to challenge the students to demonstrate their information search and retrieval expertise. This is an innovative and somewhat risky instruction technique. However, in those instruction sessions where the librarian actively involves the students by assigning them to perform the live search demonstrations there is a noticeable decline in IAKT syndrome. The students provide examples of searching the library databases and Internet search engines needed for specific research assignments. Involving students in the instruction session is a dynamic way to activate student learning. Because it requires the instructor to in essence "hand over" the session to a student, sometimes in a completely spontaneous way, it can be subject to a number of challenges. There is both promise and pitfall when students take over the information literacy session, but when managed appropriately by the instructor there are more successes than failures.

Why involve students?

With so many instructors doing real-time search demonstrations during information literacy sessions, students have adapted to the live searching environment. Instructors can no longer depend on "live demos" with their "what if" spontaneity, to add dynamism to an instruction session. The opportunity for spontaneity still exists, but it depends on the instructor's willingness to try something where he or she has less control and therefore risks an uncertain outcome. This form of active learning technique requires a different sort of librarian to work. Mabry wrote, "The most problematic step for the instructor is the first one: accepting a new role in the classroom that involves some loss of control." (Mabry, 1995, p. 183). Taking on such risks may benefit librarian instructors as well as their students. Moving beyond rote instructor-prepared search demonstrations will serve to keep librarians engaged in their own instruction sessions.

Initially, it was personal boredom that sparked an effort to identify and explore new ways to add that dynamic element back to the instruction session, but it seemed that any change should also benefit both the student and faculty member. To some extent the problem is an outcome of the instruction setting at the institution. Like many academic library buildings, there is no dedicated instruction classroom. The institution also has a limited number of hands-on training labs that are available to the librarians. That means the vast majority of instruction sessions are conducted in classrooms equipped with an instructor's podium; students are without computers. While hands-on computer classrooms afford more opportunities for keeping students activated, there are also more possibilities for Internet distraction. And even when they are designed and applied for hands-on learning sessions, programmed exercises can

leave students feeling unchallenged and underwhelmed. Despite the instructor thinking it offers a higher level of activity for them, too many students can simply sleepwalk through these exercises with no real learning taking place.

The shift from static to dynamic technique is crucial because contemporary traditional undergraduate students, practiced at multitasking with gaming, instant messaging and other electronic gadgetry, are likely to have a short attention span for a librarian whose database demonstration consists of a series of searches that point out which buttons to click, how to e-mail documents, and other passive gestures. (Welsh, 2004; Mangan, 2001). To achieve some real learning in these sessions, information literacy instructors must find better ways to activate the students. Getting them to participate in the session as search demonstrators is one way to succeed. Classroom experience indicates that students are initially resistant, but that when one volunteers and is modestly successful others begin to join the instruction. An involved faculty member can also help to encourage students to step up to the podium, but the librarian must work supportively with the student demonstrator to make sure that he or she has a positive experience even if the search may fail to achieve the desired result.

Starting with student search demonstrations

The author's first experiences in having students do database searches in instruction sessions were primarily in reaction to students who showed real signs of IAKT syndrome. On more than one occasion students stated that they already knew about the library resources, or that they had watched the author give previous instruction sessions. That behavior actually provides the perfect opening to engage students. It allows the library instructor to respond with "That's great. I would appreciate it if you could help me with this session by showing the class what you know." At that point, with the instructor inviting the student to participate, the student might have to admit to lacking the knowledge or skill required for participation. But if the student feels qualified to do so he or she will agree to show what he or she knows.

At that point it is up to the librarian to create the opportunity for learning. Students who think they know what to do may provide a great example of what students are capable of accomplishing in the library search environment. However, their errors and oversights may help others to understand why searches sometimes work poorly and what to do to make improvements. Even when students readily admit they don't know what to do, assuring them that abundant librarian support is provided to volunteers can help overcome any fears of failure or embarrassment. While this approach may seem slightly confrontational, because it may involve challenging the students, it can also be handled with humor and positive thinking. One strategy is to encourage other students to join in getting their peers to volunteer. That often eliminates the overtones of a librarian versus student showdown at the podium. Like all active instruction methods this one requires a degree of librarian creativity, role-playing, and taking oneself somewhat less seriously.

The first few attempts with this technique were primarily spontaneous experiments. While they were reasonably successful many insights were gained from the student demonstrations. For example, to improve the odds for success when first experimenting with this method use it in those sessions that will depend on the library's more common resources (e.g., ProQuest, Lexis/Nexis). Because many students are familiar with them it will be somewhat easier to find willing search demonstrators.

Had the sessions involved something more unique (e.g., FirstSearch), volunteers may have been harder to find. Faculty rarely questioned my approach to database instruction. Most seemed satisfied to defer to me as the information literacy instruction expert when it came to library instruction, and allowed me complete freedom to get the students involved. I rarely encounter faculty who disapprove of spontaneously involving students in the instruction.

Another important aspect that was initially overlooked was the instructor's reaction. After all, faculty expect that a librarian instructor is there to show students how to conduct the research for the assignment, not to have students do all the search demonstrations. That was just one of multiple issues that required further thought, analysis and planning if students would continue to do the database search demonstrations in instruction sessions. With that in mind and after multiple experiments with this technique the author began to develop specific strategies designed to both maximize the value of having students demonstrate searches and manage those situations when the instruction session may go astray. Once students take over the computer, anything can happen.

Leading the students to lead the instruction

Spontaneity is good, but things may go better with a limited element of control or anticipation whenever database searching is being demonstrated. The key is to find the right balance. Perhaps the first consideration is the role of the faculty member. Is it best to let instructors in on the plan or let them be part of the spontaneous demonstration? Experience suggested that it is beneficial to inform the instructor about intentions to have the students demonstrate searching library databases. This need not involve detailed plans. Informing the instructor in advance is a courtesy and may actually lead to some additional ideas for improving the session. It also reduces the instructor's own uncertainties about what is going to happen when the computer is relinquished to a student. The librarian can point to his or her personal experience to let faculty know that interactive library instruction is a superior learning experience when students participate rather than sit as idle observers. Faculty can help by letting a librarian know if there is a sense of adventure among a particular group of students. It is always helpful to know if one can expect to get volunteers, although a faculty member is sometimes unable to predict what may happen.

After discussing the intended plan for the library instruction session with the instructor, how is the technique to involve students best implemented in the classroom? There are three approaches for getting students to come to the computer to demonstrate searches. First, the librarian can simply call on students randomly after announcing that the session is going to be based on having class participants do all the demonstration searching. This approach can be interesting, but does increase the risk of calling on a student who is either incapable of typing, following instructions, or is in some other way a direct pathway to search demonstration disaster. A second approach to involve students occurs when the instruction session may be preceded by a brief group preparation activity. Part of the instructions for the group activity can include assigning each to identify a volunteer to demonstrate a database search. Then, as each group reports back to the class a group member's name is placed on the board next to a library database. This also facilitates the demonstration process in a shorter fifty minute session. The third, and preferred approach, requires the librarian to get to the

class early enough to catch students as they settle into their chairs. That allows the librarian a few minutes to quickly survey the students' exposure to and experience with the databases scheduled for the demonstration. This should enable the librarian to identify those students who can demonstrate a search during the instruction session while greatly minimizing the possibilities for unpleasant surprises.

The experienced student, or those who think they are, may still run into problems during the course of a search demonstration. While the second of three methods described in the previous paragraph may help to minimize these situations they rarely are entirely eliminated. When the student has previously searched the database the demonstration process will be more efficient. The author has yet to encounter any student whose skill level with and knowledge of library databases is so extensive that the demonstration fails as a learning experience for the demonstrator and his or her classmates. When the demonstration does call for an infrequently used database and no student has experience, the library instructor should seek out a student he or she knows. If one can be found the personal connection may increase the student's comfort level with the demonstration. Being at a smaller university or college allows librarians to know students on a personal level, facilitating good classroom interaction. At significantly larger institutions, this solution may be unrealistic, but that is when some advanced consultation with the faculty member may result in the identification of good volunteers (see Table I).

When the students take over

Developing an instruction plan around student search demonstrations involves a number of risks. An instruction librarian can minimize them by anticipating and being ready to respond to some of these more commonly encountered problems:

For students	For faculty	For librarians
Active learning method that encourages students to participate	Students are more engaged in the class session	Eliminates or reduces boredom of conventional lecture-style instruction session
Students can demonstrate their skill to other students; rewards participation	Provides more realistic perspective on student search skills	Demonstrations are more realistic; not perfect searches conducted by a librarian
Students see that other students make mistakes and that no student is an expert searcher; student confidence in their own search ability increases	Allows an opportunity for enhanced collaboration with librarians in coordinating search demonstrations	Librarian can engage students in correcting search mistakes of their classmates; help students develop confidence in their skills
By providing search examples students take more responsibility for their own learning	Sees better quality research on course papers and assignments	Perceived more as partner in the instructional design of the class session, with faculty, rather than interloper in the classroom
Students are entertained by searching of their fellow students, especially when things get messy	Gives faculty member more opportunities to participate than traditional library lecture	Spontaneous results that occurs during searches can lead to great teachable moments

Table I.
Advantages of student
live search demos

- *No student volunteers to search.* This can be difficult to contend with as no instructor wishes to force a student in an uncomfortable situation. Making arrangements with the faculty member in advance may help. The faculty member can either lead you to students who are known to actively participate or may be willing to provide encouragement for students to participate (i.e. announcing it will count towards the class participation grade). It certainly helps to know several students in any class, which may be the case if one is an active instructor or public service professional who has significant student contact. Still, if no student volunteers immediately take advice from discussion experts. If no volunteer comes forward within seconds, simply wait. Thirty seconds of silence is reasonable and will send a message that you intend to be patient until someone does volunteer. However, if all else fails, start the first demonstration and try to stir the pot by asking students for their suggestions. This may warm the crowd and stimulate a volunteer for another search demonstration.
- *The student who volunteers for a demonstration is poorly suited for the task.* This can mean anything from someone who types poorly to one who is in way over his or her head. The challenge is to extricate yourself and the class from the situation without causing embarrassment to the volunteer. A properly prepared librarian can correctly manage this predicament without being flustered or otherwise suddenly wishing he or she had avoided this technique. The best solution is to get other students involved as “helpers”. If a volunteer is floundering start asking other students to provide advice or suggestions. This method prevents the instructor from making the error of jumping in with a “let me show you how to do this” takeover of the demonstration. Also be prepared by knowing in advance where any demonstration can be terminated and be switched to another student. For example, the instructor may choose to have the floundering student stop after the initial part of the demonstration, for example a basic search example. Then another student volunteer can be obtained for the remaining segment of the search demonstration.
- *The students are totally unprepared to discuss the assignment.* While the instruction librarian can seek to prevent this from happening through advance preparation with the faculty member, he or she may run into a situation where students are unfamiliar with the assignment or they have yet to give any thought to their assignment topics. Again, be prepared by thinking up topics in advance that will provide opportunities for the type of research that is required by the assignment. Such situations may call for more limited expectations. A student should certainly be able to participate when working with the librarian’s suggested topic, but experience demonstrates that student volunteers almost always have a more successful search demonstration when using a topic he or she is actively researching.

Two other important considerations for letting students take over instruction session demonstrations are where to begin and what role to play. A good start to an instruction session is to relate what is going to happen to something the students already know and also to provide some specific objectives for the session; these are two important phases in the pedagogical cycle. (Lever-Duffy *et al.*, 2005, p. 49) To connect the instruction session to what is already happening in the course a librarian may wish to

ask the students to give a quick summarization of recent discussions in the course. When students are assigned to groups for a course project an alternate method involves directing the students to get into their groups for a quick pre-search assignment. For example, students could be asked to identify their strategy for dividing up the research and resources they plan to use.

To begin the discussion of the research assignment write on the board, or have listed in advance on a handout, three to five specific objectives. These could include objectives such as “by the end of this class all students will know the three databases needed to research this assignment” or “in the next hour all students will learn how to use the advanced search features of library databases and two Internet search engines in preparation for the research assignment”. At this point the students should be familiar with the assignment and their approach to it, and be primed to see some real-time search examples.

The entire experience will hinge on getting the session underway by bringing volunteers up to the podium. Be prepared with some scenarios that will create the opportunity to get students to volunteer. It may be helpful to remind them that they have already seen librarians demonstrate searches, that they are already familiar with some of the library databases, and that their help is needed to demonstrate the databases best suited for their specific research. The appropriate point in the instruction session to begin having volunteers take over is mostly a matter of personal choice. A librarian instructor may wish to wait until the class is led to a specific database. More adventurous instructors may begin by having a student come to the podium, and then instructing that student to show how he or she would begin searching for information on the topic. Because the instructor can only roughly anticipate what the student may do once in control of the classroom computer, he or she must be prepared to gently guide the student to the appropriate resources.

As the session leader the instructor's responsibility is to step back, guide the session and be able to relinquish control. Avoid the urge to tell students what to do and how to navigate every situation. It can be healthy for students to see that they have classmates who lack expertise in using the library resources. It will also demonstrate that a student need not be as skilled as a librarian to accomplish a reasonably good database search. At times it becomes necessary to make those suggestions and comments that guide the session to where it needs to go in order to achieve the desired learning outcomes. Be prepared to ask questions such as “What do you think would happen if you tried . . .” and then give a suggestion, or ask other students to provide suggestions. If “guide on the side” was ever an important role to play as an information literacy instructor, this is the time.

Considerations for hands-on computer labs

Much of the discussion of technique for student live online demonstrations in this article assumes the more common situation in which the classroom provides a computer only for the lecturer. However, more academic institutions are making available classrooms where every student is at a computer, or at a “laptop institution” every student brings their own laptop to class. It's clear that it is beneficial to engage as many students in the instruction session, and the opportunities offered by having all students at a computer should be recognized. Even in these situations there are benefits to having students demonstrate searches. Many of the advantages described thus far,

enhanced participation, better engagement, the value of students observing how other students search, and increased involvement of the faculty member, will all still apply in the hands-on computer lab setting. But it is a more unique setting for this type of instruction, and some alternate strategies and caveats may be in order.

In hands-on settings one often finds computer control software that allows the instructor to project any student's computer; decide in advance if the software will be used, and if so, how it will be used. It may still be advantageous to have students come to the podium to demonstrate a search as it puts them into the role, if momentarily, as the instructor. Students could be asked to use the strategy demonstrated, and then critique it based on their search results. Then those new variations of the strategy could be projected. This may all lead to additional discussions about search strategy and why some approaches work better than others. This may be another way to get all the students more involved in the demonstrations.

Another possibility is to have groups of students work on searches and then send up a volunteer to demonstrate the group's best one. Students may be more eager to volunteer to show a group strategy than their own as it reduces the focus on that individual student's search ability. In addition, group activity enhances the participation level of all students. It may also resolve the problem of choosing a volunteer because it places that task in the hand of the students. An adventurous librarian and instructor could even turn the group approach into a competition to see which one can devise the best strategy, as judged by the search results, uses of system features, or other criteria. In general, computer classrooms should not extensively shift the dynamic of the student live search demo. It should make possible the use of any and all other strategies that library instructors would routinely employ in these settings, and instead of the librarian demonstrating all the searches and giving all the answers, some of that work would be relinquished to student searchers. And that constant source of difficulty in instructing in hands-on classrooms, the distractions of e-mail, web surfing, etc., might actually be diminished when students are engaged as volunteers, especially when they are being randomly called upon to demonstrate their searches at the front of the classroom (see Table II).

Conclusion

Think of the student-led live demo as a situational technique. As an instructional method it may be the most appropriate one depending on the circumstances. This includes situations that offer some combination of factors. For example, a faculty with the proper demeanor for getting involved, students who may be familiar to the library instructor, the students' familiarity level with the databases being demonstrated, a classroom that lends itself to having students offer search demonstrations, at least 50 minutes but preferably an hour, or an assignment that lends itself to student searching demonstrations that are likely to convey the message that success is possible; not all assignments may be equally well represented. Library instructors will always have reasons to conduct sessions where students stay away from the instructor's podium. Experience and consultation with the faculty member can help determine if letting students take over the search demonstrations will succeed. If, for example, a class has ten students or less and investigation reveals that the students have no exposure to the databases needing demonstration that is an indicator that student-led demonstrations

For students	For faculty	For librarians
Students may be reluctant to volunteer or will do so only when forced by faculty; they are less enthusiastic	May be embarrassed if students are uncooperative or disruptive	More work required to coordinate live search demos; less effort and commitment needed for traditional lecture and demonstration
Poor student searches could possibly be replicated by students	Could question if sufficient material is covered as student searching takes longer	Greater risk; may fail if students and faculty are uncooperative or if a student volunteer does a terrible job
Students could be potentially as bored with what fellow students are doing as when librarian demonstrates all searching	May prefer to have librarians do it all and may see the students' demos as a waste of class time	Less information can be covered; additional time must be spent organizing students and allowing for their searches
More experienced searchers could miss out on valuable tips for technique that a librarian would demonstrate	May see need to collaborate with librarian to prepare for demos as awkward imposition on their teaching and research responsibilities	Must think fast on feet to catch student errors and turn them into learning opportunities

Table II.
Disdvantages of student
live search demos

should perhaps be avoided. Another exception might be a session in a hands-on training facility where students can be otherwise activated at their own workstation

Search demonstrations by students need not be perfect. In fact, expect some rough spots and the occasional flop, especially the first few times trying it. Even if students get a less thorough instruction session than they would if a librarian did all the demonstrations, it is this author's observation that they ultimately have a more powerful learning experience when their peers search the library databases. Having students demonstrate searches powerfully illustrates that every student really does have a great deal to learn about searching library databases and search engines. It is a technique that activates students and opens up their minds up to ways in which library databases can help them be more effective researchers. Some critics of information literacy have charged that it is nothing more than an attempt to turn students into librarians (Wilder, 2005). If turning students into librarians during an instruction session can help alleviate IAKT Syndrome, then that's an action academic library professionals should wholeheartedly support.

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